DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

70.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003262 Address: 333 Burma Road **Date Inspected:** 15-Jul-2008

City: Oakland, CA 94607

OSM Arrival Time: 1000 **Project Name:** SAS Superstructure **OSM Departure Time:** 1800 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Japan Steel Works **Location:** Muroran, Japan

CWI Name: Kuan Chung **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower, Jacking and Deviation Saddle

Summary of Items Observed:

The following report is based on METS observations at Japan Steel Works (JSW) in Muroran Japan. Current work: Casting, machining and repair of Saddles.

Fabrication Shop # 4

On this date the QA representative Dong J, Shin arrived at Japan Steel Works (JSW) of Muroran Japan and traveled to JSW fabrication shop #4, QA Inspector observed Mr. M. Kato (A Shift), Mr. S. Watanabe (A Shift), welding on W2-E1 fillet weld on inside of rib plate weld access hole. SMAW welding was performed utilizing with welding procedure specification (WPS) SJ-3011-14. The welding was performed in the 1F (Flat) and 2F(Horizontal) position. The filler metal utilized was identified as 4.8 mm, Class E9018M, Brand name Hoballoy. The welding parameters and heat control were monitored by Intertek Testing Services Quality Control (QC) inspector Mr. Makhmud Ashadi at periodic intervals. The minimum preheat temperature of 160 degrees Celsius and maximum inter pass temperature of 260 degrees Celsius was verified to meet the WPS requirements by Mr. Makhmud and the QA inspector utilizing Digital thermometer. This data was entered into the QC inspector's daily log, identifying the location on a weld map. The SMAW welding average amperage and voltage by clamp type meter and travel speed were verified to be within the welding procedure specification parameter range of 245 amps to 265 amps, 22 volts to 25 volts and travel speed of 132 to 161 mm per minute for the 4.0mm electrode.. The welding was continued to night shift. Visually, general welding appears to meet the minimum requirements of the welding procedure specification and contract documents.

NDT Inspection

WELDING INSPECTION REPORT

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On this date the QA representative Dong J, Shin arrived at Japan Steel Works (JSW) of Muroran Japan and traveled to JSW fabrication shop #4, QA Inspector observed NISC NDT Technician Mr. K. Kobayashi and Mr. R. Kumagai perform Magnetic Particle Testing on run out tap removal areas. Magnetic particle testing was with yoke AC current with red particles.

Summary of Conversations:

No specific conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer